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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/638,151	08/15/2000	Marcus H. Pendergrass	28549-165555	1602
26694	7590	04/19/2005	EXAMINER	
VENABLE, BAETJER, HOWARD AND CIVILETTI; LLP P.O. BOX 34385 WASHINGTON, DC 20043-9998			PHU, PHUONG M	
			ART UNIT	PAPER NUMBER
			2631	

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No. **09/638,151**

Applicant(s)

PENDERGRASS ET AL.

Examiner

Phuong Phu /

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5-16,22,23,29,30,34-45,51,52 and 58 is/are rejected.
- 7) ☒ Claim(s) 2-4,17-21,24-28,31-33,46-50 and 53-57 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 1/18/05.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 5-16, 22, 23 and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Li (6,331,997), prior art of record.

-Regarding to claim 1, see figure 1, and col. 3, line 8 to col. 4, line 67, Li discloses a method comprises:

step (see col. 3, lines 8-20 and col. 4, lines 61-67) of specifying pulse characteristics (e.g., interval, pulse position, pulse polarity, etc.) relative to at least one non-fixed reference (e.g., intervals, pulse positions of a pulse train) in accordance with a code of a plurality of codes (e.g.,

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LA-CDMA orthogonal code group), wherein the pulse characteristics define one of a plurality of communication channels (e.g., 16 channels of 16 users) defined by said plurality of codes, and step (see col. 4, lines 61-67) of applying said code relative to said at least non-fixed reference.

-Regarding to claim 5, Li discloses that said at least one reference is a characteristic value of a given pulse (e.g., intervals, pulse positions of a pulse train) (see figure 1, and col. 3, lines 8-20 and col. 4, lines 61-67)

-Regarding to claim 6, Li discloses that said given pulse is a preceding pulse (e.g., pulse interval of a pulse must not be equal to a preceding pulse and other pulses in the pulse train) (see col. 3, lines 15-17).

-Regarding to claim 7, Li discloses that said given pulse is a succeeding pulse (e.g., pulse interval of a pulse must not be equal to a succeeding pulse and other pulses in the pulse train) (see col. 3, lines 15-17).

-Regarding to claims 8-10, Li discloses that a pulse characteristic is a temporal characteristic (e.g., pulse position) or a non-temporal characteristic (e.g., pulse polarity, pulse interval).

-Regarding to claims 11-14, Li discloses that the code is a CDMA code (see 4, line 61).

-Regarding to claims 15, 16, 22, 23 and 29, Li discloses that the code is generated using a method (see col. 3, lines 26-32).

***Claim Rejections - 35 USC § 102/103***

4. Claims 30, 34-45, 51, 52 and 58 are rejected, under 35 U.S.C. 102(e) as being anticipated by, or under 35 U.S.C. 103(a) as being unpatentable over, Li.

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-Regarding to claim 30, as applied for claim 1, see figure 1, and col. 3, line 8 to col. 4, line 67, Li discloses a transmission system employing a code of a plurality of codes wherein said code specifies pulse characteristics relative to at least one non-fixed reference, said pulse characteristics defining one of a plurality of communication channels defined by said plurality of codes for wireless communications (see also col. 1, lines 8-13). Li transmission system inherently or obviously should comprise a transmitter and a receiver which employ said code of a plurality of codes for a wireless communication.

-Claim 34 is rejected with similar reasons set forth for claim 5.

-Claim 35 is rejected with similar reasons set forth for claim 6.

-Claim 36 is rejected with similar reasons set forth for claim 7.

-Claims 37-39 are rejected with similar reasons set forth for claim 8-10.

-Claims 40-43 are rejected with similar reasons set forth for claims 11-14.

-Claims 44, 45, 51, 52 and 58 are rejected with similar reasons set forth for claims 15, 16, 22, 23 and 29.

#### ***Allowable Subject Matter***

5. Claims 2-4, 17-21, 24-28, 31-33, 46-50 and 53-57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

6. Applicant's arguments filed on 1/28/05 have been fully considered.

-The previous rejection to claim 30-58, under 35 USC 112, first paragraph, has been withdrawn since claim 30 was amended to overcome the rejection.

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- The previous rejection to claim 1-29, under 35 USC 112, second paragraph, has been withdrawn since claim 1 was amended to overcome the rejection.

-Claims 2-4, 17-21, 24-28, 31-33, 46-50 and 53-57 are now indicated allowable.

-However, claims 1, 5-16, 22, 23, 29 and 30, 34-45, 51, 52 and 58 are deemed not patentable with reasons in a new-ground rejection as set forth above in this Office Action.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 571-272-3009. The examiner can normally be reached on M-F (6:30-2:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Phuong phu*

Phuong Phu  
04/11/05

**PHUONG PHU**  
**PRIMARY EXAMINER**

Phuong Phu  
Primary Examiner  
Art Unit 2631